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Bit Slave Units with Clamp Terminal Blocks

# CRT1B-MD04SLP(-1)

## Simple and Intelligent IP54 Bit Slave Units That Resist Dust and Splashing

Screw-less dust- and splash-proof IP54 Bit Slaves for bit-level distribution. The I/O power supply is supplied from the communications power in the previously connected flat cable, and has a short-circuit detection function for protection.

- IEC 60529 protection enables bit-level distributed installation without control boxes.
- Screw-less models makes wiring as easy as a single push.
- Short-circuit protection safeguards the network from I/O short circuits.
- Simple communications connections with flat cable and connectors.
- Models with 2 or 4 points eliminate the need for unnecessary I/O points.
- Dust- and splash-proof models can be used in environments where protection is necessary.
- Bit-level distribution to support essentially any application.



### Ordering Information

Name	Specifications			Model
IP54	Inputs/outputs	2 inputs and 2 outputs	NPN	CRT1B-MD04SLP
			PNP	CRT1B-MD04SLP-1

### Performance Specifications

For Basic Performance Specifications of Slave Units, refer to page 26.

### Input Section Specifications

Item	Specification	
Model	CRT1B-MD04SLP	CRT1B-MD04SLP-1
I/O capacity	2 inputs	
Internal I/O common line	NPN	PNP
ON voltage	10.5 VDC min. (between each input terminal and the V terminal)	10.5 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1 mA max.	
Input current	3.0 mA max./input (at 10.5 VDC)	
Sensor power supply voltage	Communications power supply voltage + 0 V (max.) Communications power supply voltage - 1 V (min.)	
ON delay	1.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	2 inputs/common	
Power short-circuit detection	Supported	
Isolation method	No isolation	
Input indicators	LEDs (yellow)	
Degree of protection	IEC standard IP54	
Installation	Screw installation (M4)	
Power supply type	Network power supply	
Communications power supply current consumption (See note.)	80 mA max. for 24-VDC power supply voltage 90 mA max. for 14-VDC power supply voltage	75 mA max. for 24-VDC power supply voltage 85 mA max. for 14-VDC power supply voltage
Weight	191 g max.	

**Note:** The current consumption is for Bit Slave Unit communications current when all inputs and outputs are OFF, i.e., it does not include input device current consumption or output load current consumption. The communications power supply is also used for the I/O power supply for sensors and actuators. Be sure to consider the sensor and actuator current consumption and the number of sensors and actuators connected.

The power supply current consumption is expressed by the following formula.

Communications power supply current consumption = Bit Slave Unit communications current consumption + (Bit Slave Unit input current x number of inputs used) + (sensor current consumption x number of sensors used) + (actual load current x number of actuators used)

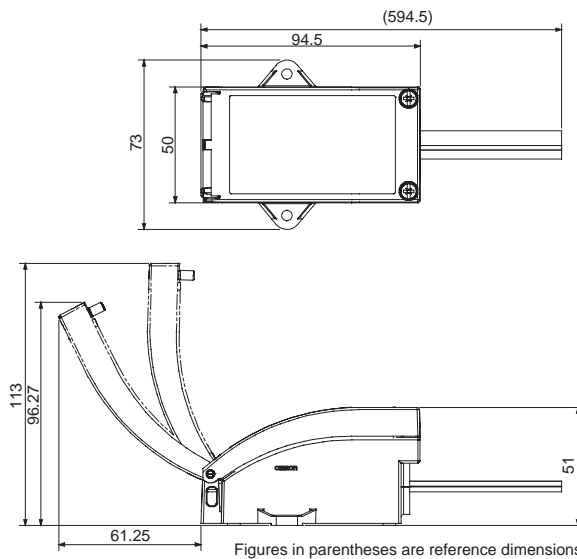
## Output Section Specifications

Item	Specification	
Model	CRT1B-MD04SLP	CRT1B-MD04SLP-1
I/O capacity	2 outputs	
Internal I/O common	NPN	PNP
Rated output current	0.2 A/output	
Load power supply voltage	Communications power supply voltage + 0 V (max.) Communications power supply voltage - 1.2 V (min.)	
Residual voltage	1.2 V max. (0.2 A DC, between each output terminal and the BS-terminal)	1.2 V max. (0.2 A DC, between each output terminal and the BS+ terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	2 outputs/common	
Load power short-circuit detection	Supported	
Isolation method	No isolation	
Input indicators	LEDs (yellow)	

## Dimensions

(Unit: mm)

### CRT1B-MD04SLP (-1)



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